

Asymptotic Behavior of some Income Inequality Indexes

S. Mirzaei, G. R. Mohtashami Borzadaran and M. Amini

Department of Statistics, Ferdowsi University of Mashhad.

Abstract. This paper presents consistent estimators for some important income inequality indexes. The empirical distribution function has an important role in finding these estimators which under weak conditions are asymptotical normal. Based on asymptotic normality, it is possible to make some inferential statistics such as test hypotheses about inequality indexes and construct confidence intervals for them. To estimate the mean and variance of the studied estimators, bootstrap, jackknife, linearization method and theory of U-statistics are proposed.

Keywords. Income Inequality, Asymptotic Normality, Consistent, Bootstrap Confidence Interval, U-statistics.